

137532

SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800
 Nov. 3/18/2004 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date 11/19/04 Serial # 09/993,967 Priority Application Date 2000 12/06
 Your Name Mihewis Examiner # _____
 AU 2822 Phone 272-1838 Room 5A30
 In what format would you like your results? Paper is the default. ☒ PAPER ☐ DISK ☐ EMAIL

If submitting more than one search, please prioritize in order of need.

Need before 11/23

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

11-10-04 11:22 IN

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: _____

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. _____

What types of references would you like? Please checkmark:

Primary Refs ☒ Nonpatent Literature _____ Other _____
 Secondary Refs ☒ Foreign Patents _____
 Teaching Refs _____

What is the topic, such as the **novelty**, motivation, utility, or other specific facets defining the desired **focus** of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 4, 5, 7, 8, 22, 23, 25, 26 & 27

Problem: See pages 5 lines 1-21
Solution: " " 5 & 6

Scott

Please do an updated search.

Staff Use Only

Searcher: Scott Horton

Searcher Phone: 2-2663

Searcher Location: STIC-EIC2800, JEF-4B68

Date Searcher Picked Up: 11/18/04

Date Completed: 11/19/04

Searcher Prep/Rev Time: 360

Online Time: 59

Type of Search

Structure (#) _____

Bibliographic ☒

Litigation _____

Fulltext ☒

Patent Family _____

Other _____

Vendors

STN ☒

Dinlog ☒

Questel/Orbit _____

Lexis-Nexis _____

WWW/Internet _____

Other _____

SET ABB=ON PLU=ON

FILE 'HCAPLUS' ENTERED AT 13:34:10 ON 19 NOV 2004

L1 QUE STI OR TRENCH? OR GROOVE? OR ULSI OR
VERTICAL (2A) (DRAM# OR CAPACITOR? OR TRANSISTOR? OR MEMOR?)
L2 QUE MEMORY? OR MEMORIE? OR RAM? OR DRAM? OR
RDRAM? OR SDRAM? OR STOR#### OR REGISTER?
L3 QUE COLL!R? OR EXPAN#### OR INDENT#### OR
RECESS#### OR RECED#### OR RING## OR WIDE#####
L4 QUE SECOND OR ADDITIONAL OR PLURAL#### OR
ANOTHER OR OTHER# OR MULTI OR MULTIPL? OR FURTHER? OR MORE
L5 QUE (CONNECT#### OR STRAP#) (2A) (BURIE# OR
BURYING OR BURY### OR RECESS? OR BELOW OR UNDER? OR SA OR
SELF (W)ALIGN####)
L6 QUE BOTTOM# OR LOWER# OR UPPER# OR TOP# OR
UNDERSIDE# OR UNDER(W)SIDE#
L7 8 S L1 AND L2 AND L3 AND L4 AND L5 AND L6
L8 8 DUP REM L7 (0 DUPLICATES REMOVED)
L9 8 S L8
L10 0 S L9 NOT P/DT NOT PY>2000
L11 8 S L8
L12 8 S L11 AND P/DT

File 350:**Derwent WPIX** 1963-2004/UD,UM &UP=200474
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 File 344:**Chinese Patents Abs** Aug 1985-2004/May
 (c) 2004 European Patent Office
 File 347:**JAPIO** Nov 1976-2004/Jul(Updated 041102)
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 File 371:**French Patents** 1961-2002/BOPI 200209
 (c) 2002 INPI. All rts. reserv.
 File 383:**Ei EnCompassPat**(TM) (Ontap)
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| Set | Items | Description |
|-----|---------|---|
| S1 | 626482 | STI OR TRENCH? OR GROOVE? OR ULSI OR VERTICAL(2N) (DRAM? ? - OR CAPACITOR? OR TRANSISTOR? OR MEMOR?) |
| S2 | 2826246 | MEMORY? OR MEMORIE? OR RAM? OR DRAM? OR RDRAM? OR SDRAM? OR STOR???? OR REGISTER? |
| S3 | 2014497 | COLL?R? OR EXPAN???? OR INDENT???? OR RECESS???? OR RECED?- ??? OR RING?? OR WIDE????? |
| S4 | 6593743 | SECOND OR ADDITIONAL OR PLURAL???? OR ANOTHER OR OTHER? ? - OR MULTI OR MULTIPL? |
| S5 | 25011 | (CONNECT???? OR STRAP? ?) (2N) (BURIE? ? OR BURYING OR BURY?- ?? OR RECESS? OR BELOW OR UNDER? OR SA OR SELF(W)ALIGN????) |
| S6 | 3398331 | BOTTOM? ? OR LOWER? ? OR UPPER? ? OR TOP? ? OR UNDERSIDE? ? OR UNDER(W)SIDE? ? |
| S7 | 61 | S1 AND S2 AND S3 AND S4 AND S5 AND S6 |
| S8 | 1338499 | SEMICOND? OR IC OR INTEG?(N)CIRCUIT? OR ICS |
| S9 | 31 | S7 AND S8 |
| S10 | 31 | IDPAT (sorted in duplicate/non-duplicate order) |
| S11 | 31 | IDPAT (primary/non-duplicate records only) |
| S12 | 21264 | AU=(YAMADA, T? OR YAMADA T?) |
| S13 | 439 | AU=(KAJIYAMA T? OR KAJIYAMA, T?) |
| S14 | 3 | S12 AND S13 |
| S15 | 3 | S14 NOT S11 |

File 2:**INSPEC 1969-2004/Jul W4**
(c) 2004 Institution of Electrical Engineers
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(c) 2004 Royal Soc Chemistry
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File 987:**TULSA (Petroleum Abs) 1965-2004/Aug W1**
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File 34:**SciSearch(R) Cited Ref Sci 1990-2004/Oct W4**
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File 434:**SciSearch(R) Cited Ref Sci 1974-1989/Dec**
(c) 1998 Inst for Sci Info

| Set | Items | Description |
|------------|----------|--|
| S1 | 149903 | STI OR TRENCH? OR GROOVE? OR ULSI OR VERTICAL (2N) (DRAM? ? - OR CAPACITOR? OR TRANSISTOR? OR MEMOR?) |
| S2 | 3132232 | MEMORY? OR MEMORIE? OR RAM? OR DRAM? OR RDRAM? OR SDRAM? OR STOR???? OR REGISTER? |
| S3 | 3769549 | COLL?R? OR EXPAN???? OR INDENT???? OR RECESS???? OR RECED?- ??? OR RING?? OR WIDE????? |
| S4 | 16531928 | SECOND OR ADDITIONAL OR PLURAL???? OR ANOTHER OR OTHER? ? - OR MULTI OR MULTIPL? OR FURTHER? OR MORE |
| S5 | 9324 | (CONNECT???? OR STRAP? ?) (2N) (BURIE? ? OR BURYING OR BURY?- ?? OR RECESS? OR BELOW OR UNDER? OR SA OR SELF(W)ALIGN????) |
| S6 | 3525113 | BOTTOM? ? OR LOWER? ? OR UPPER? ? OR TOP? ? OR UNDERSIDE? ? OR UNDER(W)SIDE? ? |
| S7 | 0 | S1 AND S2 AND S3 AND S4 AND S5 AND S6 |
| S8 | 4 | S1 AND S2 AND S3 AND S4 AND S5 |
| S9 | 4 | RD (unique items) |
| S10 | 4 | S9 NOT PY>2000 |
| S11 | 678145 | S1:S6 AND SEMICOND? |
| S12 | 16488 | S11 AND S1 |
| S13 | 1952 | S11 AND S1 AND S3 |
| S14 | 11907868 | SECOND OR ADDITIONAL OR PLURAL???? OR ANOTHER OR OTHER? ? - OR MULTI OR MULTIPL? |
| S15 | 450 | S11 AND S1 AND S3 AND S14 |
| S16 | 0 | S11 AND S1 AND S3 AND S14 AND S5 |
| S17 | 74 | S11 AND S1 AND S3 AND S14 AND S6 |
| S18 | 14 | S17 AND S2 |
| S19 | 4 | S18 NOT S10 NOT PY>2000 |

File 348: **EUROPEAN PATENTS** 1978-2004/Nov W01

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File 349: **PCT FULLTEXT** 1979-2002/UB=20041118,UT=20041111

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| Set | Items | Description |
|-----|--------|---|
| S1 | 200432 | STI OR TRENCH? OR GROOVE? OR ULSI OR (UPRIGHT? OR VERTICAL OR VERT) (2N) (DRAM? ? OR CAPACITOR? OR TRANSISTOR? OR MEMOR?) |
| S2 | 71414 | MEMORY? OR MEMORIE? OR RAM OR RAMS OR DRAM? OR RDRAM? OR S-DRAM? OR STOR???? OR REGISTER? |
| S3 | 150949 | COLL?R? OR EXPAN???? OR INDENT???? OR RECESS???? OR RECED?-??? OR RING?? OR WIDE????? |
| S4 | 190552 | SECOND OR ADDITIONAL OR PLURAL???? OR ANOTHER OR OTHER? ? - OR MULTI OR MULTIPL? OR FURTHER? OR MORE |
| S5 | 8210 | (CONNECT???? OR STRAP? ?) (2N) (BURIE? ? OR BURYING OR BURY?-?? OR RECESS? OR BELOW OR UNDER? OR SA OR SELF(W)ALIGN????) |
| S6 | 158200 | BOTTOM? ? OR LOWER? ? OR UPPER? ? OR TOP? ? OR UNDERSIDE? ? OR UNDER(W)SIDE? ? |
| S7 | 66 | S1(10N)S2(10N)S3(10N)S4(10N)S5(10N)S6 |
| S8 | 66 | IDPAT (sorted in duplicate/non-duplicate order) |
| S9 | 66 | IDPAT (primary/non-duplicate records only) |
| S10 | 0 | S9 AND AC=(WO OR US) (S)AD<20001206 |
| S11 | 3 | S9 AND AC=(WO OR US) (S)AD=19820403:20001206 |
| S12 | 3 | S9 AND AC=(WO OR US) (S)AD=19871103:20001206 |
| S13 | 33 | S9 AND AC=(WO OR US) (S)AD=19930323:20001206 |
| S14 | 18 | S9 AND AC=(WO OR US) (S)AD=19980719:20001206 |
| S15 | 43 | S9 AND PD<20001206 |
| S16 | 30 | S9 AND PD=19990113:20001206 |
| S17 | 57 | S10:S16 |
| S18 | 17 | S4(10N)S2(10N)(S3(5N)S1)(10N)S5(10N)S6 |